and a second surface, said first and second surfaces being provided opposite from one another;

b1 at least a first electrode disposed on said first surface and at least a second electrode disposed on said second surface;

a semiconductor zone of a second conductivity type opposite to the first conductivity type;

a pn-junction formed between said semiconductor zone of the second conductivity type and said semiconductor body;

at least one of said first and second electrodes being in contact with said semiconductor zone of the second conductivity type;

semiconductor regions of the second conductivity type provided in said semiconductor body;

said semiconductor regions being disposed at a respective distance from said semiconductor zone of the second conductivity type such that said semiconductor regions surround said semiconductor zone of the second conductivity type in a well-shape;

each one of said semiconductor regions being interrupted at at least one location by channels formed by said semiconductor body, said channels electrically connecting parts of said

semiconductor body separated by said semiconductor regions; and

B1

said semiconductor regions of the second conductivity type having a second doping concentration such that said semiconductor regions are not completely depleted of charge carriers in case of a reverse-biasing of said pn-junction.

B2

Claim 11 (twice amended). A semiconductor configuration, comprising:

a semiconductor component selected from the group consisting of a diode, a MOS transistor and a thyristor;

said semiconductor component including:

a semiconductor body of a first conductivity type, said semiconductor body having a first doping concentration greater than 5×10^{13} charge carriers cm^{-3} and having a first surface and a second surface, said first and second surfaces being provided opposite from one another;

at least a first electrode disposed on said first surface and at least a second electrode disposed on said second surface;

a semiconductor zone of a second conductivity type opposite to the first conductivity type;

a pn-junction formed between said semiconductor zone of the second conductivity type and said semiconductor body;

at least one of said first and second electrodes being in contact with said semiconductor zone of the second conductivity type;

semiconductor regions of the second conductivity type provided in said semiconductor body;

said semiconductor regions being disposed at a respective distance from said semiconductor zone of the second conductivity type such that said semiconductor regions surround said semiconductor zone of the second conductivity type in a well-shape;

each one of said semiconductor regions being interrupted at at least one location by channels formed by said semiconductor body, said channels electrically connecting parts of said semiconductor body separated by said semiconductor regions; and

said semiconductor regions of the second conductivity type having a second doping concentration such that said semiconductor regions are not completely depleted of charge carriers in case of a reverse-biasing of said pn-junction.

Claim 12 (amended). A semiconductor component, comprising:

b3

a semiconductor body having a semiconductor layer of a first conductivity type with a doping concentration greater than 5 x 10^{13} charge carriers cm^{-3};

a semiconductor zone of a second conductivity type opposite to said semiconductor layer of said first conductivity type;

a pn-junction formed between said semiconductor zone and said semiconductor layer; and

semiconductor regions of the second conductivity type in said semiconductor body, said semiconductor regions surrounding said semiconductor zone at a respective distance except for a channel formed of said semiconductor layer interrupting each respective one of said semiconductor regions and electrically connecting parts of said semiconductor body separated by said semiconductor regions, said semiconductor regions having a doping concentration preventing completely depleted of charge carriers upon a reverse-biasing of said pn-junction.